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# **DATA COLLECTION FOR LIFE CYCLE ASSESSMENT OF POWDER GELCOAT**

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## ABSTRACT

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<p>This thesis is a part of European Union project Ecogel Cronos which aims to conduct data collection for life cycle assessment of zero volatile organic compound powder gelcoat with fast curing properties from acquiring the ingredients until the process of curing of the powder gelcoat.</p> <p>The aim of this thesis work is to focus on collecting information from production process of the main ingredient of the powder gelcoat - unsaturated polyester resin, as well as from the production process of powder gelcoat. Combined and quantified results from both processes were compiled to be used in creating simulation process with SimaPro 8 Life Cycle Assessment software.</p> <p>As a result, information from production processes was collected as precisely as possible. Appropriate calculations were conducted in accordance with formulations of the unsaturated polyester resin and the powder gelcoat. Necessary calculations and educational estimations upon available and unavailable ingredients were compiled for SimaPro 8 software. The base for the continuation of the research was established</p>		
<b>Key words</b> Ecogel Cronos, data collection, Life Cycle Assessment, powder gelcoat, SimaPro 8 software, unsaturated polyester resin		

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